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Table 2. Ethanol production from glucose and xylucose by recombinant strains of *E. coli* (ATCC11303).

Parameter ^a	10% Glucose										8% Xylucose				
	pLOI297b	KO1	KO2	KO3	KO4	KO5	KO10 (recA)	KO11 (frd)	KO11 (frd) ^d	KO12 (frd,recA)	KO4 +Ac ^c	pLOI297 ^b	KO4 (frd)	KO11 (frd,recA)	KO12
Base (mmoles/g sugar)	1.1	5.7	6.3	5.5	1.3	1.4	1.1	0.6	0	1.1	1.0	1.4	1.6	0.5	0.64
Ethanol Yield (g/liter)	48.8	4.0	4.0	10.4	52.8	52.8	51.2	52.8	38.8	54.4	54.4	36.0	36.0	41.6	40.8
Ethanol Yield (g/g sugar)	0.52	0.05	0.05	0.13	0.56	0.56	0.54	0.54	0.39	0.57	0.57	0.47	0.47	0.53	0.53
Theoretical Yield (%)	101	10	10	26	110	110	107	107	76	112	112	94	94	104	103
Vol. Prod. ^c (g/liter ^{*h})	1.9	0.3	0.3	0.4	1.5	1.5	1.8	1.7	1.4	1.2	1.6	1.0	1.1	1.3	1.1
30-h Ethanol (g/liter)	41.8	3.2	3.2	6.4	36.0	36.0	38.0	38.0	29.0	30.4	38.5	30.0	25.6	30.4	26.0
Cell Yield (g/g sugar)	.048	.021	.021	.028	.044	.040	.041	.042	.041	.035	.045	.050	.047	.051	.048

^a Calculations based on total sugar initially added.^b ATCC11303 (pLOI297) has plasmid-borne ethanol genes.^d Fermentation conducted without pH control.^e Supplemented with 3 g/liter sodium acetate (22 mM final concentration).^c Vol. Prod., volumetric Productivity = yield/time.